RED RIVER BASIN CHLORIDE CONTROL, TEXAS, AND OKLAHOMA (Wichita River Basin Reevaluation Study)

Red River Chloride Project History

This unique project would reduce naturally occurring brine emissions into the Wichita and Red Rivers to allow economical use of these waters for municipal, industrial, and agricultural purposes.

The Red River Chloride Control project was initiated in the 1950's to determine source areas and recommend control measures for 10 of the natural seeps of chlorides (brines) from the Red River Basin above Lake Texoma. The objective was to remove 4,000 tons per day of salt from natural emission areas before it entered the Red River. Currently the water in the Red River requires a great deal of costly treatment to remove impurities before it becomes suitable for municipal, industrial and agricultural use. As originally conceived, this project would benefit communities in four states from towns like Vernon Texas all the way to Shreveport, Louisiana.

Portions of the chloride control project have been constructed at Estelline Springs and within the Wichita River Basin. In 1964, a ring dike was constructed at Estelline Springs (Area V), which utilizes hydrostatic pressure to suppress the natural chloride seeps. On the South Fork of the Wichita River, upstream of lake Kemp (Area VIII), a brine collection facility has been in operation since 1987. Brine seeps are captured and pumped along a 22-mile pipeline to a brine containment facility called Truscott Lake. In addition, another brine collection facility has been constructed on the Middle Fork of the Wichita River (Area X) with plans to pump the brines to the Truscott facility, however installation of the pumps, with associated utilities and pipeline remain to be completed. Over 10,000 Acres have been purchased near Crowell, TX for mitigation for the entire Red River Control Project. Negotiations are ongoing with Texas A&M and Texas Parks and Wildlife Dept. for wildlife management of the lands.

On 13 November 1997, due to environmental concerns raised by various resource agencies, the Office of the Assistant Secretary of the Army for Civil Works (ASA/CW) recommended the Corps of Engineers delay remaining construction efforts on the Red River Chloride Control Project and perform a complete reevaluation of only the Wichita River Basin chloride control features, located entirely in Texas, upstream of Wichita Falls, TX.